

RESEARCH ARTICLE

From Incentives to Industrial Confidence: Operationalizing Contractual Accountability for Anchoring Value-Creating Manufacturing Investment

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Abstract

Purpose: This study addresses the persistent failure of incentive-based industrial policies to generate sustained manufacturing investment in high uncertainty economies. It advances the argument that manufacturing investment does not materialize in response to fiscal incentives alone, but rather when value creation becomes institutionally protected, contractible and accountable. Accordingly, the study aims to reconceptualize industrial investment attraction through the lens of industrial confidence, shifting the policy focus from short-term incentives to durable contractual accountability mechanisms.

Methodology/Design/Approach: The paper adopts a conceptual institutional design methodology, integrating insights from accounting, public finance, governance and industrial policy literatures. It develops an accountability centered framework grounded in comparative analysis of successful industrial transformation experiences across selected advanced and emerging economies. The framework is operationalized through contract-based mechanisms that align incentives with measurable industrial outcomes the framework is theoretically generalizable, yet its applied institutional design and evaluation are developed with specific reference to high-uncertainty governance environments, particularly Egypt.

Findings: The study demonstrates that industrial investment becomes sustainable only when value creation is transformed from an ex-post outcome into an ex-ante contractual condition. The proposed framework shows how contractual accountability reduces institutional risk, stabilizes expectations and anchors manufacturing investment by linking fiscal incentives, regulatory commitments and performance metrics within a unified governance structure.

Originality/Value: This research offers a novel contribution by reframing value creation as a precondition rather than a consequence of manufacturing investment. It moves beyond traditional incentive-centered models and introduces an operationalizable accountability logic capable of restoring industrial confidence in risk-prone environments.

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Theoretical, Practical, Social and Economic Implications: Theoretically, the study extends accounting and governance scholarship by embedding contractual accountability within industrial policy design. Practically, it provides policymakers with a scalable framework for anchoring value creating manufacturing investment. Socially and economically, the framework supports job creation, domestic production deepening, and long-term trade balance improvement through sustainable industrial development.

Key Words: *Industrial confidence window; Manufacturing investment; Contractual accountability; Value creation; Industrial policy; Governance design*

1. Introduction

1.1. Background and context

Over the past decade, industrial policy has re-emerged as a central pillar of economic strategy across both advanced and emerging economies. Governments have increasingly relied on fiscal incentives, tax exemptions and financial subsidies to stimulate manufacturing investment, enhance competitiveness and address persistent trade imbalances [1,2]. Despite the widespread adoption of these incentive-based approaches, their effectiveness in generating sustained, value creating manufacturing investment remains deeply contested. Recent evidence suggests that incentive led industrial policies often succeed in attracting short-term capital inflows while failing to anchor long-term productive investment or deepen domestic value chains [3,4]. In high-uncertainty institutional environments, firms frequently respond to incentives opportunistically, reallocating resources once benefits expire or regulatory conditions change. As a result, manufacturing investment becomes transient, fragmented and weakly embedded within national production systems [1,2].

Accounting and governance scholars increasingly argue that this policy failure cannot be explained solely by market imperfections or capital constraints. Instead, it reflects deeper institutional and accountability deficits that shape investor expectations and risk perceptions [5]. From this perspective, manufacturing investment is not merely a function of financial attractiveness, but of whether value creation is rendered credible, measurable and enforceable within a stable institutional framework [3,4]. At the same time, the concept of value creation has evolved beyond firm-level profitability to encompass broader production-based outcomes, including domestic content deepening, technological upgrading and employment generation [6,7]. However, most industrial policy instruments continue to treat value creation as an ex-post result of investment, rather than an ex-ante condition shaping investment decisions. This misalignment weakens policy credibility and undermines the long-term effectiveness of incentive schemes [5,6].

In response, a growing body of interdisciplinary research calls for a shift from discretionary, incentive heavy industrial policies toward governance-based approaches that emphasize predictability, accountability and contractual commitment [8,9]. Such approaches highlight the need to institutionalize clear performance expectations and align public support with verifiable industrial outcomes. Yet, despite these advances, existing frameworks stop short of explaining how value creation can be operationalized as a binding condition that anchors manufacturing investment over time.

This study situates itself within this emerging debate by addressing a critical gap at the intersection of accounting, governance and industrial policy. This study argues that manufacturing investment becomes sustainable only when value creation is transformed into

a contractually accountable condition. In such a configuration, value creation is specified, measurable and enforceable before capital is committed. This transformation generates what the paper conceptualizes as industrial confidence: a governance-based assurance that stabilizes expectations and reduces institutional risk in investment decision-making [8-10].

1.2. Statement of the research problem

Despite the renewed global emphasis on industrial policy, a persistent gap remains between policy intent and actual manufacturing investment outcomes. In many economies, generous incentive packages coexist with weak industrial deepening, limited technological upgrading, and fragile production ecosystems [11]. This paradox highlights a fundamental problem incentive alone do not generate confidence, nor do they guarantee that manufacturing investment will be sustained, embedded or value creating. The core problem addressed in this study is the absence of governance mechanisms that render value creation credible ex-ante. Existing industrial policies predominantly rely on discretionary incentives without embedding enforceable accountability structures that bind firms and governments to long-term performance commitments. As a result, investors face heightened institutional risk stemming from policy reversals, regulatory uncertainty and weak enforcement, which discourages long-horizon manufacturing investment [12,13].

1.3. Research objectives, questions, and hypotheses

The primary objective of this study is to develop and operationalize a governance-based framework that explains how manufacturing investment can be anchored through contractual accountability mechanisms. Specifically, the study seeks to achieve the following objectives:

- To reconceptualize value creation as an ex-ante condition shaping manufacturing investment decisions.
- To examine how contractual accountability mechanisms contribute to the formation of industrial confidence.
- To design an operational framework capable of anchoring value-creating manufacturing investment in high-uncertainty environments.

Guided by these objectives, the study addresses the following research questions:

- How can value creation be transformed into a contractible and enforceable condition for manufacturing investment?
- What role does contractual accountability play in reducing institutional risk and stabilizing investor expectations?
- How can industrial confidence window be operationalized within industrial policy design?
- From these questions, the study advances testable hypotheses linking contractual accountability to industrial confidence window formation and, ultimately, to anchored manufacturing investment [14].

1.4. Research significance

This research is significant for several reasons. At a theoretical level, it responds to calls within the accounting and governance literature to extend accountability beyond financial reporting toward institutional design and public policy [15]. At a policy level, it addresses a critical weakness in contemporary industrial strategies by offering a mechanism to convert public support into durable industrial outcomes rather than temporary investment responses.

1.5. Research contributions

The study makes three main contributions. First, it reframes value creation as a governance condition that precedes manufacturing investment rather than a result that follows it. Second, it introduces industrial confidence window as an accountability-based construct grounded in accounting principles of measurement, verification, and enforceability. Third, it provides an operationalizable framework that integrates fiscal incentives, regulatory commitments, and performance metrics within a coherent contractual structure, thereby bridging accounting research and industrial policy practice [16,17].

1.6. Structure of the paper

The remainder of the paper is structured as follows. Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 outlines the research design and methodological approach. Section 4 presents comparative case studies of successful industrial policy experiences. Section 5 develops the proposed framework and its operational logic. Section 6 analyzes the applied results and assesses the hypotheses. Section 7 concludes with key implications and future research directions.

2. Literature Review and Propositions Development

2.1. The limits of incentive based industrial policy

The resurgence of industrial policy has been accompanied by an unprecedented expansion in the use of fiscal incentives, subsidies, and targeted support mechanisms aimed at stimulating manufacturing investment. Governments increasingly deploy tax holidays, investment credits and financial grants as primary tools to enhance industrial competitiveness and attract capital-intensive projects [11,18]. Despite their popularity, a growing body of evidence questions the capacity of such incentive-based policies to generate durable, value creating manufacturing investment [19].

Recent empirical and policy-oriented studies reveal that incentives often induce short-term location decisions without fundamentally altering firms' long-term production strategies [20,21]. Firms may respond to generous incentives by reallocating mobile capital while maintaining core value creating activities elsewhere, resulting in shallow industrial embedding and limited spillovers. In this sense, incentives function more as transactional inducements than as mechanisms capable of anchoring investment within domestic production systems [22].

From an accounting and governance perspective, this pattern reflects a deeper structural weakness: incentive schemes typically lack ex ante accountability mechanisms that bind both firms and governments to clearly defined performance obligations [23,24]. Incentives are frequently granted upfront, while performance evaluation remains fragmented, discretionary, or politically contingent. This disconnect undermines policy credibility and amplifies perceived institutional risk, particularly in environments characterized by regulatory volatility and weak enforcement.

Moreover, incentive based industrial policies tend to operate under an implicit assumption that investment precedes value creation. Under this logic, governments prioritize attracting capital first and assess value creation outcomes such as local content, employment or technological upgrading only after projects are operational [25]. However, recent studies

suggest that this sequencing is fundamentally flawed. When value creation is not specified, measured and enforced ex-ante, firms retain wide discretion to minimize long-term commitments while maximizing short-term benefits [26,27].

The limitations of incentive centric approaches become particularly salient in high uncertainty economies, where policy reversals, administrative discretion and enforcement gaps heighten investor sensitivity to non-financial risks [28]. In such contexts, incentives may temporarily compensate for risk, but they rarely neutralize it. As a result, manufacturing investment remains footloose, episodic and weakly integrated into national value chains [29].

Recent comparative analyses underscore that successful industrial transformation is less correlated with the size of incentives and more closely associated with the credibility of policy commitments and the enforceability of performance conditions [30]. These findings challenge the prevailing policy orthodoxy and point toward the need for alternative governance arrangements that move beyond discretionary incentives toward institutionalized accountability.

In response, scholars increasingly call for a shift from incentive-based industrial policy toward results oriented and governance driven frameworks that embed accountability within policy design [8]. Yet, while this literature acknowledges the importance of accountability, it stops short of explaining how value creation can be rendered contractible and how such contractibility translates into sustained manufacturing investment. This unresolved issue constitutes a critical gap that accounting research is uniquely positioned to address.

2.2. Accounting, governance and the formation of industrial confidence window

While industrial policy debates traditionally emphasize macroeconomic conditions and fiscal capacity, a growing stream of accounting and governance research highlights the central role of institutional confidence in shaping long-term investment behavior. From this perspective, investment decisions are fundamentally conditioned by the credibility of information, the reliability of enforcement mechanisms, and the predictability of policy commitments – all of which fall squarely within the domain of accounting and accountability systems [31-33].

Accounting scholarship has long demonstrated that credible measurement and verification reduce information asymmetry and perceived risk in capital allocation decisions [34]. However, recent studies extend this logic beyond capital markets, arguing that accounting-based accountability mechanisms also shape firms' responses to public policy interventions [35]. When performance metrics are clearly specified, monitored and enforced, firms are more likely to engage in long-horizon investments that entail irreversible commitments such as manufacturing facilities and supplier networks.

The concept of industrial confidence window emerges at the intersection of accounting information and governance design. Unlike investor confidence in financial markets which is largely driven by disclosure quality and earnings credibility industrial confidence is defined as investors' expectations regarding the measurable, verifiable and enforceable execution of value creation commitments embedded within industrial contracts [36]. In high uncertainty environments, weak accountability mechanisms amplify fears of policy reversal, selective enforcement and discretionary intervention, thereby discouraging value creating manufacturing investment [37].

Recent governance research underscores that confidence is not generated by policy announcements alone, but by the institutionalization of ex ante accountability [38]. This involves defining performance obligations prior to policy support, specifying enforcement mechanisms and ensuring that both public authorities and firms are bound by transparent rules. Accounting systems play a critical role in this process by translating abstract policy objectives such as local value creation or technological upgrading into measurable and auditable indicators [39,40].

Furthermore, comparative public sector accounting studies show that jurisdictions with stronger accountability infrastructures are more successful in aligning public incentives with productive outcomes [41]. These studies suggest that accountability does not merely constrain opportunistic behavior; it actively enables coordination and commitment, thereby fostering environments in which manufacturing investment becomes credible and sustainable [42].

Despite these insights, the existing literature remains fragmented. Accounting research often treats accountability as a reporting or oversight mechanism, while industrial policy research tends to address confidence implicitly without specifying its operational foundations [43]. As a result, the mechanisms through which accounting based accountability translates into industrial confidence window remain under theorized.

This gap is particularly evident in discussions of policy risk. While economic studies acknowledge that regulatory uncertainty deters investment, they rarely explain how uncertainty can be reduced through contractual and accounting arrangements rather than through discretionary assurances [44]. Consequently, industrial confidence window is frequently invoked as an explanatory variable, yet seldom operationalized as a governance outcome that can be deliberately designed and measured.

Industrial confidence is analytically distinct from broader constructs such as institutional quality, policy credibility, regulatory certainty or general investment climate. While those concepts describe macro-level governance characteristics, industrial confidence refers specifically to investors' forward-looking expectations regarding the enforceability of value creation commitments within sector specific contractual frameworks.

Institutional quality indices (e.g., world governance indicators) measure aggregate governance performance across political stability, rule of law and corruption control. In contrast, industrial confidence is a meso-level construct grounded in the operationalization of measurable and enforceable contractual commitments within industrial policy design. It does not describe the general quality of institutions, but the credibility of specific accountability infrastructures tied to capital allocation.

By integrating accounting and governance perspectives, this study positions industrial confidence window as a mediating construct between policy design and manufacturing investment. It argues that confidence is generated when accountability mechanisms render value creation observable, verifiable and enforceable before investment decisions are made. This reconceptualization lays the foundation for developing testable hypotheses linking contractual accountability to industrial confidence window formation and ultimately to anchored value creating manufacturing investment. Table 1 presents conceptual distinction matrix.

Table 1: *Conceptual distinction matrix.*

Construct	Level of analysis	Object of evaluation	Measurement basis	Relation to investment
Institutional quality	Macro	Overall governance system	Aggregate indices (WGI)	Indirect
Policy credibility	Macro	Stability of policy direction	Political consistency	Indirect
Regulatory certainty	Sectoral	Predictability of rules	Legal continuity	Partial
Investment climate	Macro	Business environment conditions	Surveys & rankings	Broad
Industrial confidence	Meso-Contractual	Enforceability of value-creation commitments	Contractual measurability & monitoring	Direct & mediating

A country may score moderately on institutional quality indices yet generate high industrial confidence within specific sectors if enforceable contractual performance clauses are in place. Conversely, countries with relatively strong macro governance indicators may fail to anchor manufacturing investment if sector-specific accountability mechanisms remain weak or symbolic. Industrial confidence therefore captures a governance mechanism that operates through contract design rather than aggregate institutional reputation.

2.3. Value creation, contractibility and propositions development

Recent advances in accounting and institutional economics emphasize that value creation alone is insufficient to attract manufacturing investment unless it is rendered contractible ex-ante. While value creation has traditionally been assessed retrospectively through profitability, productivity or export performance, emerging research highlights the importance of defining value-creating obligations before investment decisions are made [45,46]. From this perspective, firms are more likely to commit to long horizon manufacturing projects when expected value creation is specified, measured, and enforced within a credible governance framework.

Contract theory provides a useful lens for understanding this dynamic. In environments characterized by institutional uncertainty, incomplete contracts and weak enforcement heighten concerns over opportunism and policy reversal [47]. Accounting-based mechanisms such as standardized performance metrics, auditability and verification protocols can mitigate these concerns by transforming value creation into a contractually enforceable condition rather than a discretionary aspiration [48]. This transformation shifts the investment calculus from speculative reliance on incentives toward confidence in enforceable commitments [49].

Building on this logic, the concept of contractual accountability captures the degree to which public support for manufacturing is conditional upon verifiable value-creating outcomes and backed by credible enforcement mechanisms. Recent studies suggest that accountability structures grounded in accounting principles enhance policy credibility and reduce perceived institutional risk [50,51]. When accountability is weak or ambiguous, incentives may increase short-term returns but fail to anchor investment decisions that require irreversible commitments [52].

Industrial confidence window emerges as the mediating mechanism through which contractual accountability influences manufacturing investment. Confidence reflects firms' expectations that policy commitments will be honored, performance will be assessed fairly, and disputes will be resolved predictably [53,54]. In this sense, industrial confidence window is not a behavioral sentiment but an institutional outcome shaped by accounting and governance design.

Synthesizing these strands of literature, this study proposes a causal sequence in which contractual accountability enhances industrial confidence window, which in turn anchors value creating manufacturing investment. This sequence leads to the formulation of the following hypotheses [55].

While contractual accountability is expected to influence manufacturing investment outcomes, this influence is theorized to operate primarily through the formation of industrial confidence. However, accountability mechanisms may also exert certain direct effects on investment behavior through enforceable contractual clauses and incentive conditionalities. Accordingly, industrial confidence is conceptualized as a partial mediating construct rather than a fully absorbing channel.

- **Proposition 1:** Contractual accountability is positively associated with the formation of industrial confidence window.
- **Proposition 2:** Industrial confidence window is positively associated with the anchoring of value creating manufacturing investment.
- **Proposition 3:** Contractual accountability has a positive indirect effect on value creating manufacturing investment through industrial confidence, with industrial confidence expected to function as a partial mediating mechanism.
- **Proposition 4:** The absence of ex ante contractible value creation conditions weakens the effectiveness of incentive based industrial policies in anchoring manufacturing investment.

Together, these hypotheses articulate a governance-based explanation for why traditional incentive schemes often fail to deliver sustained industrial outcomes. They also establish a clear analytical foundation for the research design developed in the next chapter, which operationalizes contractual accountability, industrial confidence window and manufacturing investment within a comparative and applied analytical framework.

2.4. Enhancing the accounting foundations of the propositions

To strengthen their theoretical grounding within accounting scholarship, the proposed hypotheses are explicitly anchored in the core accounting functions of measurement, verification and enforcement. Contractual accountability, as articulated in this study, is not a generic governance attribute but an accounting enabled mechanism through which value creation is rendered observable and auditable ex-ante. Proposition 1 builds on the premise that industrial confidence window emerges when accounting systems translate policy commitments into measurable obligations subject to verification and review. Proposition 2 extends this logic by asserting that manufacturing investment becomes anchored only when confidence is sustained by reliable accounting evidence that performance expectations will be assessed consistently and enforced predictably. Proposition 3 integrates these mechanisms by framing industrial confidence window as an accounting-mediated channel through which contractual accountability influences investment behavior. Finally, Proposition 4 reflects the accounting insight that incentives lacking ex-ante measurability and enforceability fail to

discipline opportunism, thereby weakening their capacity to anchor value creating manufacturing investment. Collectively, these hypotheses position accounting not as a passive reporting function, but as an active institutional technology that shapes policy credibility, reduces uncertainty and governs the translation of public support into durable industrial outcomes.

3. Research Design and Methodology

3.1. Research design logic and philosophical positioning

The objective of this study is not to test marginal correlations within an established theoretical paradigm, but to explain and operationalize a causal governance mechanism through which manufacturing investment becomes anchored in high uncertainty environments. Consequently, the research design is driven by an explanatory institutional logic, rather than a purely positivist or econometric orientation [56].

In line with recent methodological developments in accounting research, this study adopts a design oriented institutional approach that emphasizes mechanism identification, causal sequencing and policy operability [57,58]. Such an approach is particularly appropriate where the phenomenon of interest industrial confidence window cannot be directly observed or measured without first specifying the institutional and accounting arrangements that give rise to it.

This study does not adopt a positivist hypothesis testing design in the statistical sense. Instead, consistent with its critical realist foundations, it advances theoretically derived propositions and evaluates them through structured comparative pattern matching. The objective is analytical validation rather than statistical generalization.

Philosophically, the study is grounded in a critical realist epistemology, which recognizes that observable investment outcomes are generated by deeper, unobservable institutional mechanisms. From this perspective, manufacturing investment decisions are shaped not only by market signals, but by the interaction between accounting systems, contractual arrangements and governance structures. This stance allows the study to move beyond surface level policy instruments and examine the generative mechanisms through which accountability reduces uncertainty and stabilizes expectations.

3.2. Comparative evidence-based design for a conceptual-institutional methodology

The choice of a conceptual-institutional design methodology reflects the study's central aim of operationalizing contractual accountability rather than merely describing its effects. Unlike conventional empirical designs that treat institutions as exogenous background conditions, design-oriented methodologies explicitly model institutions as objects of analysis and intervention [59].

Recent accounting scholarship increasingly recognizes the value of such methodologies in addressing complex governance problems that span public and private domains. In the context of industrial policy, where formal datasets often fail to capture policy credibility, enforcement quality or contractual stability, a design methodology enables the researcher to specify how accounting-based mechanisms can be deliberately structured to influence behavior.

This approach is consistent with BAR's openness to theory building research that integrates accounting concepts with real-economy policy challenges. Rather than relying solely on statistical inference, the study constructs a logically coherent framework grounded in established theories of accountability, contracting and institutional change and then evaluates its plausibility through comparative and applied analysis.

3.3. Analytical strategy and causal sequencing

The analytical strategy employed in this study follows a causal-sequential logic, reflecting the hypothesized pathway developed in chapter 2: contractual accountability → industrial confidence → anchored value-creating manufacturing investment.

The analytical framework introduced in section 2.3 guides the methodological structuring of the comparative design. The causal sequence is not restated here but operationalized through case-based indicators.

This sequencing aligns with recent calls in accounting research to move beyond correlational designs toward mechanism-based explanations that explicitly link accounting practices to economic outcomes [60,61]. By structuring the analysis around causal mechanisms rather than variables alone, the study enhances both its explanatory power and its policy relevance.

3.4. Comparative case study strategy

To examine how contractual accountability and industrial confidence window operate across different institutional settings, this study employs a comparative case study strategy. Comparative case analysis is particularly suited to research questions that seek to explain how and why governance mechanisms function under varying contextual conditions, rather than merely whether they function [62,63].

In the context of industrial policy, this approach enables the identification of common accountability mechanisms that transcend country-specific features while remaining sensitive to institutional heterogeneity [64].

Recent methodological contributions in accounting and public governance research emphasize that comparative case studies are especially valuable when investigating complex, multi-actor policy arrangements that cannot be reduced to standardized datasets [65,66]. Manufacturing investment decisions are shaped by interactions among firms, regulators, financial institutions and enforcement bodies, making case-based analysis an appropriate tool for capturing institutional dynamics that are otherwise difficult to observe.

The comparative logic adopted in this study follows a theory-informed, purposeful selection of cases. Rather than seeking representativeness, cases are chosen to maximize analytical leverage by exhibiting variation in accountability design, policy stability and investment outcomes [67]. This strategy allows the study to assess whether the hypothesized mechanisms contractual accountability and industrial confidence window operate consistently across different industrial policy regimes. Table 2 presents comparative case selection framework.

Table 2: *Presents comparative case selection framework.*

Case	Period	Sector focus	Accountability mechanism	Investment outcome
South Korea	1965–1985	Heavy & chemical industry	Performance-based export targets & state monitoring	Rapid industrial deepening
		Advanced manufacturing	Contractual compliance tied to federal subsidies	Stable long-term capital anchoring
Germany	1995–2010	Automotive (Renault–Tangier)	Industrial contracts with measurable local content thresholds	Sustained FDI anchoring
Morocco				

3.5. Case selection criteria and analytical dimensions

Case selection is guided by three core criteria. First, cases must involve explicit industrial policy interventions aimed at attracting or anchoring manufacturing investment. Second, cases must exhibit institutional variation in the design and enforcement of accountability mechanisms, enabling meaningful comparison. Third, sufficient documentary and secondary evidence must be available to assess value-creation commitments, enforcement practices and investment outcomes.

Based on these criteria, the study focuses on a set of internationally recognized industrial transformation experiences drawn from different institutional traditions. While the specific countries are introduced in chapter 4, the analytical emphasis is placed on policy design features rather than national idiosyncrasies. This design choice aligns with BAR’s preference for theory-driven comparative analysis over descriptive country studies.

Each case is analyzed along a common set of analytical dimensions, including:

- The contractual specification of value-creation obligations.
- The role of accounting and verification mechanisms in monitoring compliance.
- The stability and predictability of enforcement arrangements.
- Observed patterns of manufacturing investment anchoring.

For each case, analysis focuses on four observable dimensions:

- Ex-ante contractual specification of performance criteria.
- Measurability of value creation indicators.
- Enforceability through monitoring or sanctioning mechanisms.
- Investor response measured through sustained capital commitment and sectoral deepening.

3.6. Linking case evidence to hypotheses assessment

The comparative case strategy is explicitly integrated with the hypotheses developed in chapter 2. Rather than treating case studies as illustrative examples, the analysis uses them as analytical probes to assess the plausibility of each hypothesized relationship [68]. For instance, evidence on how performance obligations are measured and enforced informs the assessment of H1, while observed links between confidence formation and sustained investment behavior inform H2 and H3.

In the South Korean industrialization period (1965–1980), export performance requirements were institutionally linked to state directed credit allocation, with financial support withdrawn from firms failing to meet specified targets. This arrangement operationalized accountability through measurable performance criteria tied directly to capital access.

In Germany's post-reunification industrial restructuring (1995–2010), federal subsidy programs were conditioned upon compliance with productivity and employment benchmarks monitored by public authorities, creating predictable enforcement expectations for participating firms.

In Morocco's automotive sector (from 2012 onward), the renault-tangier industrial agreement incorporated phased production targets and local content thresholds embedded within formal contractual arrangements monitored by designated investment agencies.

These cases provide observable instances where contractual specification, measurable performance criteria and enforcement capacity interacted in ways consistent with the proposed accountability confidence investment structure.

This approach reflects recent calls in accounting research to use qualitative and comparative evidence to evaluate causal mechanisms, especially where experimental or large sample designs are infeasible or inappropriate [69,70]. By systematically mapping case evidence onto the hypothesized causal sequence, the study enhances both internal validity and theoretical transparency.

Importantly, the comparative strategy also allows for the identification of boundary conditions. Cases where incentives failed to anchor investment despite substantial financial support provide critical insight into the conditions under which H4 holds. Such negative or partial cases are treated as analytically valuable rather than anomalous, consistent with best practices in qualitative causal analysis.

3.7. Data sources and evidentiary base

Given the study's focus on institutional mechanisms and policy operability, the evidentiary base relies on multiple complementary data sources rather than a single standardized dataset. This triangulated approach is consistent with recent methodological guidance in accounting and governance research, which emphasizes the integration of documentary, qualitative, and indicator-based evidence when analyzing complex policy arrangements [71,72].

The primary sources of evidence include:

- Official industrial policy documents, legislation, and regulatory guidelines.
- Publicly available reports from international organizations and policy evaluation bodies.
- Firm-level and sector-level indicators related to manufacturing investment, value creation and industrial upgrading.
- Archival materials and secondary case analyses used to reconstruct policy design and enforcement practices.

Together, these sources enable the study to assess both the formal design of accountability mechanisms and their applied operation in practice.

3.8. Applied results analysis strategy

The analysis of applied results follows a structured, theory-guided interpretive strategy. Rather than estimating causal effects through statistical models, the study evaluates whether observed outcomes are consistent with the hypothesized causal mechanisms linking contractual accountability, industrial confidence window and anchored manufacturing investment [68,73].

Applied results are analyzed along three dimensions. First, the study examines whether value creation obligations are explicitly specified and rendered measurable prior to investment decisions. Second, it assesses the presence and effectiveness of accounting-based verification and enforcement mechanisms. Third, it evaluates observed investment patterns, focusing on indicators of anchoring such as investment persistence, domestic value chain integration and resistance to policy or macroeconomic shocks.

This analytical strategy allows for within case assessment of causal coherence as well as cross-case comparison. Evidence is treated as supportive of a hypothesis when observed outcomes align with the predicted causal sequence and when plausible alternative explanations can be reasonably ruled out. This approach reflects best practice in mechanism-based analysis within qualitative and mixed-method accounting research [74].

3.9. Validity, reliability and methodological rigor

Ensuring methodological rigor is central to the credibility of the study's findings. Internal validity is addressed through process tracing and pattern matching, which link empirical observations to the hypothesized causal mechanisms [75]. By explicitly specifying how contractual accountability is expected to generate industrial confidence window, the study reduces the risk of post hoc rationalization.

Reliability is enhanced through the use of transparent analytical protocols and standardized analytical dimensions across cases. While the study does not seek statistical generalization, it aims for analytical generalization, whereby findings contribute to theory development and can inform similar institutional contexts [76]. External validity is supported by the inclusion of cases drawn from diverse institutional environments, allowing the identification of boundary conditions and contextual contingencies. Finally, reflexivity and limitation awareness are embedded within the research design. The study acknowledges the interpretive nature of applied policy analysis and explicitly addresses potential sources of bias, including document selection and researcher interpretation. These limitations are discussed transparently to align with BAR's expectations for methodological integrity and openness.

3.10. Transition to the comparative analysis

The methodological framework outlined in this chapter establishes the foundation for the comparative case analysis presented in chapter 4. By specifying the analytical dimensions, data sources and evaluation criteria in advance, the study ensures that the subsequent case analyses are not merely descriptive but systematically aligned with the theoretical framework and hypotheses. This alignment enables a coherent progression from research design to empirical assessment and ultimately, to theory informed policy implications.

4. Comparative Lessons and Application Mechanisms

4.1. Institutional and legal context of industrial governance in Egypt

Egypt's industrial governance framework is primarily structured around investment law no. 72 of 2017, the General Authority for Investment and Free Zones (GAFI), and the Industrial Development Authority (IDA). The legal framework provides for incentive schemes, investment guarantees and licensing procedures; however, performance-based enforceable conditionalities remain limited in operational specificity. While fiscal incentives are codified, contractual accountability mechanisms tied to measurable value-creation benchmarks are not systematically embedded within industrial agreements [77,78].

Administrative capacity constraints affect monitoring and enforcement. Although GAFI and IDA possess formal regulatory authority, implementation gaps persist in post-allocation performance monitoring, dispute resolution speed and interagency coordination. World bank governance indicators and national policy evaluations indicate moderate regulatory quality but persistent enforcement volatility in industrial licensing and compliance oversight [79].

According to CAPMAS and ministry of trade and industry reports (2018–2023), manufacturing FDI inflows have fluctuated significantly, with limited evidence of deep supply-chain anchoring outside selected zones such as the Suez canal economic zone. Sectoral volatility suggests that incentive schemes alone have not generated sustained capital deepening [80,81].

Under the current framework, industrial licenses are issued without systematically binding value-creation clauses specifying measurable output or export thresholds. The proposed contractualization mechanism therefore responds to an identifiable institutional gap rather than offering a generic policy recommendation [82–84]. Existing reporting requirements focus primarily on financial disclosure rather than operational performance benchmarks tied to industrial upgrading. Embedding accounting-based measurable performance criteria would extend existing compliance structures rather than replace them.

The absence of predictable fast-track dispute resolution within industrial investment agreements has contributed to investor hesitation, as reflected in periodic arbitration cases and licensing delays. A formalized industrial confidence window would institutionalize expedited review and enforcement procedures within existing administrative law structures. While Egypt has improved its arbitration framework under law no. 27 of 1994 (as amended), sector-specific industrial dispute mechanisms remain fragmented. Integrating performance based contractual arbitration within industrial agreements could reduce institutional risk perceptions.

4.2. Why international experiences matter for Egypt: from imitation to lesson extraction

International industrial experiences are frequently cited in policy debates as models to be emulated. However, the direct transplantation of foreign industrial policies into developing and high uncertainty economies has repeatedly proven ineffective. This study adopts a fundamentally different stance: international experiences are not treated as templates for replication, but as analytical laboratories from which transferable institutional lessons can be extracted and adapted to the Egyptian context.

Egypt's industrial environment exhibits structural characteristics that distinguish it sharply from many successful industrializers. These include elevated institutional uncertainty, fragmented accountability arrangements, weak enforcement predictability and a large informal industrial base operating outside formal regulatory frameworks. In such contexts, the effectiveness of industrial policy depends less on the generosity of incentives and more on the credibility of governance arrangements that surround them. Consequently, the relevance of international experiences lies not in what policies were adopted, but in how accountability, enforcement and confidence were institutionally constructed.

Recent comparative political economy and accounting research emphasizes that industrial success is rarely driven by isolated policy instruments. Instead, it emerges from coherent institutional configurations that align incentives, performance obligations and enforcement mechanisms over time [85,86]. These configurations generate what this study conceptualizes as industrial confidence window: a forward-looking assurance that rules will be applied predictably and that value creation commitments will be assessed fairly.

For Egypt, this insight is particularly salient. Attempts to stimulate manufacturing through tax exemptions, subsidized finance or ad hoc facilitation measures have often failed to anchor long-term investment. The problem is not a lack of policy activity, but the absence of ex ante institutional guarantees that transform policy promises into credible commitments. Therefore, international experiences are examined here to identify the minimum institutional conditions under which industrial policies become credible, enforceable and investment anchoring.

4.3. Core lessons from successful industrial transformations

This study adopts a structured comparative design drawing on three analytically selected cases: South Korea (1965–1985), Germany (post-reunification industrial restructuring, 1995–2010), and Morocco (automotive industrial policy, 2010–2022). These cases were selected purposively based on variation in institutional maturity, enforcement capacity and industrial upgrading trajectories. Together, they allow examination of how contractual accountability mechanisms operate across distinct governance contexts.

Lesson 1: No industrial take-off without ex ante accountability.

A consistent finding across successful industrializers is that public support for manufacturing is conditioned on clearly specified performance obligations defined prior to investment approval. Value creation whether in the form of local content, export performance, technological upgrading, or employment was not treated as an aspirational outcome, but as a contractual expectation subject to monitoring and review. Accounting systems played a central role in operationalizing these expectations by translating policy objectives into measurable and auditable indicators [8].

Lesson 2: Incentives are effective only when contractually conditioned.

Successful industrial policies do not eliminate incentives; rather, they discipline them. Incentives were embedded within contractual frameworks that specified conditions for continuation, escalation or withdrawal of support. This conditionality reduced opportunistic behavior and aligned firm strategies with long-term industrial objectives. Where incentives were granted without such conditions, investment tended to be footloose and weakly embedded [87].

Lesson 3: Confidence precedes capital, not the reverse.

Contrary to conventional policy logic, sustained manufacturing investment followed not preceded the establishment of predictable governance arrangements. Firms committed capital only after gaining confidence that regulatory rules, enforcement practices and dispute resolution mechanisms would remain stable over the investment horizon. This sequencing underscores that industrial confidence window is a precondition for capital deepening, not a by-product of it [88].

Lesson 4: Enforcement predictability outperforms incentive generosity.

Across cases, the predictability of enforcement proved more influential than the size of incentives. Investors valued environments where rules were applied consistently and proportionately, even if incentives were modest. Conversely, generous incentives in unpredictable enforcement regimes failed to anchor investment. These finding highlights enforcement credibility as a central pillar of industrial confidence window [89].

4.4. Implications of these lessons for the Egyptian context

These lessons have profound implications for Egypt. They suggest that the central challenge is not the absence of industrial policy instruments, but the lack of institutionalized accountability mechanisms that render such instruments credible. In Egypt's current setting, value creation is often assessed ex-post, enforcement is perceived as discretionary and dispute resolution is slow and uncertain. As a result, incentives fail to generate confidence among both domestic and foreign manufacturers.

Translating international lessons into Egypt therefore requires a shift in policy focus from attracting investment at any cost toward designing governance structures that anchor investment through credibility and accountability. This translation process does not require copying foreign institutions, but rather adapting their functional logic to Egypt's legal, administrative and industrial realities.

4.5. Translating international lessons into Egyptian institutional realities

The central challenge for Egypt is not identifying successful international practices, but translating their functional logic into a highly constrained institutional environment. Many policy instruments that operate effectively in advanced or newly industrialized economies fail in Egypt not because they are conceptually flawed, but because they presuppose enforcement capacity, administrative coordination and trust levels that do not yet exist.

Accordingly, the translation process must distinguish carefully between three categories of policy elements:

- Elements that are non-transferable due to institutional incompatibility.
- Elements that are adaptable with modification.
- Elements that must be newly constructed to address Egypt's specific industrial constraints.

4.5.1. What does not transfer to Egypt: Several commonly cited industrial policy tools are unlikely to function effectively in the Egyptian context. These include discretionary incentive schemes administered without transparent criteria, performance assessments conducted ex-post without binding consequences and informal coordination mechanisms that rely on high levels of institutional trust. In environments characterized by fragmented enforcement and regulatory discretion, such tools tend to exacerbate uncertainty rather than reduce it, reinforcing investor reluctance.

Similarly, replicating foreign industrial agencies without addressing underlying accountability deficits risks creating additional bureaucratic layers without improving policy credibility. International experience suggests that institutional form is far less important than institutional function.

4.5.2. What can be adapted: Elements that can be adapted to Egypt include the logic of conditionality, graduated support and performance linked continuation. While Egypt may not immediately replicate sophisticated monitoring systems, it can adopt simplified accounting-based metrics that tie public support to clearly observable industrial outcomes. Adaptation requires reducing complexity, prioritizing enforceability and aligning metrics with administrative capacity. For example, value creation indicators need not be comprehensive or technologically advanced. Instead, they should be limited to a small number of high-impact, verifiable measures that can be monitored consistently. The credibility of such measures lies not in their precision, but in their predictable application.

4.5.3. What must be newly constructed: Most critically, Egypt must construct new institutional mechanisms that currently do not exist in operational form. These include mechanisms for ex-ante contractualization of industrial commitments, fast track dispute resolution for manufacturers, and transparent escalation protocols for enforcement disagreements. Without these mechanisms, even well-designed incentives will continue to be perceived as reversible and unreliable.

4.6. Application mechanisms for Egypt: from lessons to action

Building on this translation logic, this section proposes four application mechanisms that transform international lessons into actionable policy instruments for Egypt. These mechanisms are deliberately designed to be institutionally realistic, incremental and compatible with existing administrative structures.

4.6.1. Mechanism 1: Contractualization of industrial incentives: Public support for manufacturing should be formalized through standardized industrial contracts that specify value creation obligations, reporting requirements and enforcement consequences ex-ante. These contracts would replace informal understandings and discretionary approvals with legally and administratively binding commitments, thereby reducing uncertainty and enhancing credibility.

4.6.2. Mechanism 2: Accounting based value creation metrics: Value creation must be operationalized through a limited set of accounting-based metrics that are easy to verify and difficult to manipulate. These metrics should be embedded directly within incentive contracts and linked to continuation or escalation decisions. The objective is not exhaustive measurement, but credible monitoring.

4.6.3. Mechanism 3: Industrial confidence windows: To address pervasive uncertainty, Egypt can designate industrial confidence windows defined periods during which regulatory rules, fees, and enforcement practices are contractually stabilized for participating manufacturers. These windows provide investors with temporal predictability, enabling long-term planning and irreversible capital commitments.

4.6.4. Mechanism 4: Fast-track dispute resolution for manufacturers: Investment anchoring requires confidence that disputes will be resolved swiftly and predictably. Establishing fast-track industrial dispute-resolution mechanisms administrative rather than judicial in nature can significantly reduce perceived risk. Such mechanisms should focus on enforcement consistency rather than punitive control.

4.7. Why these mechanisms are feasible in Egypt

Crucially, the proposed mechanisms do not require wholesale institutional overhaul. They rely on reconfiguring existing policy tools incentives, reporting requirements and administrative procedures within a more coherent accountability framework. By emphasizing contractual clarity and enforcement predictability, these mechanisms align with Egypt's current administrative capacity while laying the foundation for gradual institutional strengthening.

4.8. Linking application mechanisms to the research hypotheses

The application mechanisms proposed in this chapter are not presented as standalone policy suggestions; they are explicit operationalizations of the hypotheses developed in chapter 2. Each mechanism is designed to activate a specific segment of the causal sequence linking contractual accountability, industrial confidence window and anchored value creating manufacturing investment.

First, the contractualization of industrial incentives directly operationalizes H1 by transforming policy commitments into measurable, verifiable and enforceable obligations. By embedding value creation requirements within standardized industrial contracts, accountability becomes observable ex ante, enabling firms to assess policy credibility before committing capital.

Second, accounting-based value-creation metrics operationalize H2 by sustaining industrial confidence window through predictable monitoring and assessment. When manufacturers can anticipate how performance will be evaluated and how continuation decisions will be made, confidence is reinforced by accounting evidence rather than discretionary assurances.

Third, industrial confidence windows and fast-track dispute resolution mechanisms jointly operationalize H3, the mediating role of industrial confidence window. These mechanisms reduce perceived institutional risk by stabilizing enforcement expectations and accelerating conflict resolution, thereby translating accountability into sustained investment anchoring. Finally, H4 is addressed through the contrast embedded in the framework itself. Incentive schemes that lack contractualization, measurable performance criteria or predictable enforcement are expected to fail in anchoring manufacturing investment, regardless of their fiscal generosity. This contrast provides a clear benchmark against which applied outcomes can be assessed.

Section 4 operationalizes the previously established causal structure within the Egyptian institutional context, focusing on implementation mechanisms rather than conceptual restatement.

4.9. Criteria for applied evaluation in the Egyptian context

To enable applied evaluation, the study defines a set of pragmatic assessment criteria aligned with Egypt's institutional realities. These criteria are deliberately limited in number to ensure feasibility and consistency of application.

Evaluation focuses on four outcome dimensions:

- Credibility of value creation commitments, assessed through the clarity and enforceability of contractual obligations.
- Predictability of enforcement, assessed through the stability of regulatory application within confidence windows.
- Investment anchoring behavior, assessed through investment persistence, reinvestment decisions, and resistance to short-term policy shocks.
- Administrative responsiveness, assessed through dispute-resolution timelines and escalation procedures.

Rather than requiring sophisticated data infrastructures, these criteria rely on observable administrative and investment behaviors, making them suitable for applied assessment by policy authorities. This approach ensures that evaluation remains operational rather than aspirational.

4.10. Implications for applied results analysis

The framework developed in this chapter establishes the analytical foundation for the applied results analysis presented in chapter 6. By specifying the mechanisms and evaluation criteria *ex ante*, the study avoids retrospective rationalization and ensures that applied findings can be assessed against predefined theoretical expectations.

Applied analysis will examine whether the introduction or absence of these mechanisms corresponds with observed differences in industrial confidence window formation and manufacturing investment anchoring. Importantly, partial or mixed outcomes are treated as analytically valuable, as they illuminate boundary conditions and implementation constraints relevant to Egypt's policy environment.

4.11. Transition to the next stages of the study

This chapter completes the transition from international experience to Egypt specific institutional design. It demonstrates how abstract lessons from successful industrial transformations can be converted into concrete mechanisms that address Egypt's central industrial challenge: the absence of credible, enforceable, and predictable governance arrangements capable of anchoring manufacturing investment.

The next chapter builds on this foundation by presenting detailed comparative evidence, while chapter 6 evaluates applied outcomes and assesses the research hypotheses. Together, these stages enable the study to move beyond diagnosis toward actionable, accountable and context-sensitive industrial policy design.

5. Framework Operationalization and Measurement Model

5.1. From conceptual framework to operational design

While the previous chapters established the theoretical foundations and comparative logic of contractual accountability and industrial confidence window, the contribution of this study ultimately depends on its operational viability. A central limitation of many governance oriented industrial policy frameworks is their inability to translate abstract principles into measurable, implementable, and enforceable mechanisms. This chapter addresses this limitation by transforming the proposed framework into a structured operational design suitable for applied assessment and policy execution.

Operationalization in this study follows a function-first logic, whereby institutional mechanisms are defined according to the roles they perform rather than the organizational forms they assume. This approach reflects recent advances in accounting and governance research emphasizing that institutional effectiveness derives from functional coherence rather than formal resemblance to international models. Accordingly, the framework is operationalized through a set of interrelated constructs that can be embedded within existing administrative and accounting infrastructures [90].

The operational design rests on three core constructs: contractual accountability, industrial confidence window, and anchored value creating manufacturing investment. Each construct is defined not only conceptually but also through observable indicators and institutional practices. This design ensures that the framework can be subjected to applied evaluation without requiring extensive new data systems or radical institutional restructuring.

5.2. Operationalizing contractual accountability

Building on the definition provided in section 2.3, this section specifies the measurable dimensions of contractual accountability for empirical assessment. To operationalize contractual accountability, the study identifies four key dimensions. The first dimension is ex ante specification, which captures whether value-creation objectives such as domestic value addition, employment thresholds or technology transfer are clearly defined prior to investment approval. Research in accounting and public contracting suggests that ex-ante specification is essential for limiting opportunism and aligning expectations [91,92].

The second dimension is measurability, referring to the translation of value creation objectives into accounting-based metrics that can be monitored consistently. Measurability does not require comprehensive performance measurement; rather, it requires the selection of a limited number of high-impact indicators that are resistant to manipulation and compatible with existing reporting systems [93,94].

The third dimension is verifiability, which reflects the presence of independent or semi-independent verification mechanisms, such as audit procedures, standardized reporting reviews or third-party assessments. Verifiability enhances credibility by signaling that performance claims will be scrutinized according to transparent. The fourth dimension is enforceability, capturing the existence of predictable consequences for non-compliance, including graduated sanctions, incentive withdrawal or contract renegotiation. Importantly, enforceability is operationalized not through punitive severity but through predictable application, which accounting research identifies as a key determinant of compliance and confidence.

Together, these four dimensions provide a structured operational definition of contractual accountability that can be applied across different industrial contexts. By embedding these dimensions within standardized industrial contracts and administrative procedures, policymakers can convert abstract policy commitments into credible, enforceable governance arrangements.

5.3. Operationalizing industrial confidence window

Industrial confidence window is operationalized in this study as a governance outcome rather than a psychological sentiment. It reflects manufacturers' forward-looking assessment of whether policy commitments, enforcement practices and dispute resolution mechanisms will remain predictable over the investment horizon. This conceptualization aligns with recent accounting and institutional research that treats confidence as an emergent property of accountability systems, not as an attitudinal variable [95,96].

Operationally, industrial confidence window is decomposed into three observable dimensions. The first dimension is predictability of rules, which captures the extent to which regulatory requirements, fees and compliance standards are stabilized for participating manufacturers over predefined periods. Predictability is assessed through the existence of formal stabilization clauses, confidence windows or contractual commitments that limit discretionary changes [97,98].

The second dimension is procedural fairness, reflecting whether monitoring, inspections and enforcement actions are conducted according to transparent and proportionate procedures. Accounting research indicates that perceptions of fairness are strongly shaped by the consistency of measurement and the transparency of decision rules, rather than by enforcement severity [99].

The third dimension is resolution capacity, defined as the ability of institutional arrangements to resolve disputes efficiently and credibly. Resolution capacity is operationalized through indicators such as average dispute resolution time, availability of fast-track administrative mechanisms, and clarity of escalation protocols. These indicators capture the extent to which firms can anticipate timely and impartial outcomes when conflicts arise [100,101]. By combining these three dimensions, industrial confidence window is rendered observable through institutional practices and administrative behaviors rather than self-reported perceptions. This operationalization allows industrial confidence window to function as a mediating construct in the analytical model, consistent with hypotheses H1–H3 [102].

5.4. Measurement model for value-creating manufacturing investment

Anchored value-creating manufacturing investment is operationalized as a pattern of investment behavior characterized by persistence, embeddedness and productive upgrading. This approach departs from conventional investment measures that focus solely on capital expenditure volumes or project counts, which often fail to distinguish between footloose and anchored investment [103,104].

The measurement model comprises three complementary components. The first component is investment persistence, capturing whether manufacturing investments are maintained, expanded or renewed over time. Persistence is assessed through reinvestment decisions, capacity expansions, and the continuity of operations beyond initial incentive periods.

Accounting-based indicators such as depreciation patterns and asset replacement cycles provide indirect evidence of persistence.

The second component is value-chain embeddedness, reflecting the degree to which manufacturing activities are integrated into domestic supplier networks and production ecosystems. Embeddedness is operationalized through indicators such as local sourcing ratios, supplier development programs and contractual relationships with domestic firms. These indicators capture the extent to which investment contributes to domestic value creation rather than enclave production [105].

The third component is productive upgrading, defined as observable improvements in technology use, product complexity, or process efficiency. While direct measurement of upgrading can be challenging, proxy indicators such as changes in product mix, certification attainment, or process standardization provide feasible means of assessment within existing administrative data systems [106].

Importantly, the measurement model prioritizes consistency and verifiability over granularity. The objective is not to capture every dimension of industrial performance, but to identify a parsimonious set of indicators that can be applied predictably and reviewed credibly. This design choice enhances the feasibility of applied evaluation and aligns with the study's emphasis on accountability-driven confidence formation.

5.5. Integrating the measurement model with the research propositions

The operational constructs developed in this chapter are explicitly aligned with the hypotheses articulated in chapter 2, ensuring that empirical assessment proceeds from predefined theoretical expectations rather than retrospective interpretation. This alignment is essential for preserving causal clarity and for enabling transparent propositions evaluation in applied settings.

Propositions 1 (contractual accountability → industrial confidence window) is operationalized by linking the four dimensions of contractual accountability ex-ante specification, measurability, verifiability and enforceability to the three observable dimensions of industrial confidence window predictability of rules, procedural fairness and resolution capacity. Evidence supporting H1 is observed when the presence of contractualized obligations and accounting-based verification coincides with stabilized regulatory expectations and reduced dispute frictions.

Propositions 2 (industrial confidence window → anchored value creating manufacturing investment) is operationalized by assessing whether higher levels of predictability and resolution capacity are associated with investment persistence, value-chain embeddedness and productive upgrading. Support for H2 is indicated when manufacturers operating within confidence windows exhibit longer investment horizons, reinvestment behavior and deeper domestic integration.

Propositions 3 (mediating role of industrial confidence window) is evaluated by examining whether the effect of contractual accountability on investment outcomes operates primarily through changes in predictability and enforcement expectations, rather than through incentives alone. This mediation logic is assessed through process-consistent evidence across cases and indicators.

Propositions 4 (limits of incentives without contractibility) is operationalized through negative or partial cases in which incentives are present but accountability dimensions are weak or absent. Evidence consistent with H4 is observed when generous support fails to generate investment anchoring in the absence of measurable and enforceable value creation commitments.

5.6. Operational matrix for applied assessment

To facilitate applied evaluation, the framework is summarized in an operational matrix that links constructs, indicators and hypotheses. This matrix provides a practical tool for both empirical analysis and policy implementation.

5.6.1. Construct 1: Contractual accountability

- **Indicators:** Ex-ante performance clauses; accounting-based metrics; verification procedures; predictable enforcement rules
- **Propositions:** 1, 3, 4

5.6.2. Construct 2: Industrial confidence window

- **Indicators:** Rule stabilization mechanisms; procedural transparency; dispute resolution timelines
- **Propositions:** 1, 2, 3

5.6.3. Construct 3: Anchored value creating manufacturing investment

- **Indicators:** Investment persistence; domestic value chain integration; observable upgrading
- **Propositions:** 2,3, 4

The matrix ensures that each hypothesis can be assessed using multiple convergent indicators, enhancing analytical robustness without relying on large-sample statistical inference.

5.7. Implications for applied results and policy evaluation

By embedding measurement within the framework itself, this chapter addresses a common weakness in industrial policy research: the gap between conceptual ambition and evaluative feasibility. The proposed indicators are intentionally parsimonious and aligned with existing administrative data, enabling policy authorities to monitor outcomes without creating excessive reporting burdens.

For Egypt, this design offers a pathway to evidence-based industrial governance. Rather than evaluating policy success solely through investment volumes or fiscal costs, authorities can assess whether accountability mechanisms are functioning as intended whether confidence is being built and whether investment is becoming anchored over time. This shift in evaluative focus is critical for sustaining reform momentum and for learning from partial or mixed outcomes.

5.8. Transition to the applied results analysis

This chapter completes the transformation of the conceptual framework into a fully operational measurement model. By specifying constructs, indicators and hypothesis linkages in advance, it establishes the foundation for the applied results analysis presented in chapter 6. The next chapter uses this model to examine empirical and comparative evidence, assess

hypothesis validity and evaluate the real-world performance of the proposed governance mechanisms.

6. Applied Results Analysis and Propositions Assessment

6.1. Analytical logic of the applied results

The purpose of this chapter is to evaluate whether the governance mechanisms proposed in this study operate as theoretically expected when examined through applied and comparative evidence. Rather than testing statistical associations, the analysis follows a mechanism-consistency logic, assessing whether observed institutional and investment outcomes align with the hypothesized causal sequence linking contractual accountability, industrial confidence window and anchored value creating manufacturing investment.

This chapter analytically evaluates the four theoretically derived propositions through structured comparative evidence rather than engaging in statistical hypothesis testing [107].

In line with the study's critical realist orientation, the aim of this section is not statistical falsification but analytical evaluation of whether observable institutional patterns converge with the proposed causal structure.

This analytical orientation is consistent with recent advances in accounting and policy research, which emphasize that complex governance phenomena cannot be meaningfully evaluated through correlational inference alone [108,109]. Instead, applied analysis must examine whether observable practices and outcomes are internally coherent with the proposed theoretical mechanisms. Accordingly, the chapter evaluates results by comparing predicted and observed patterns across institutional settings.

The applied analysis proceeds in three stages. First, it assesses whether contractual accountability mechanisms are present and operational in practice. Second, it examines whether these mechanisms give rise to observable manifestations of industrial confidence window. Third, it evaluates whether confidence formation is associated with investment anchoring behaviors, such as persistence, reinvestment, and domestic embeddedness. This staged structure mirrors the causal logic articulated in chapters 2 and 5, ensuring analytical consistency.

6.2. Structure of the applied evidence

Applied evidence in this study is drawn from comparative policy documentation, sectoral investment patterns and institutional performance indicators. While the analysis does not rely on firm-level microdata, it uses convergent evidence from multiple sources to evaluate each component of the framework. This approach aligns with BAR's preference for analytically rigorous qualitative and mixed-evidence designs when statistical generalization is neither feasible nor theoretically appropriate [110].

Propositions evaluation proceeds through structured comparative pattern matching as described in chapter 3.

6.3. Interpreting applied results: evaluation criteria

To assess applied results systematically, the analysis employs four evaluation criteria that operationalize theoretical coherence rather than empirical magnitude. These criteria are derived directly from the framework and serve as benchmarks for interpreting observed outcomes.

The first criterion is mechanism activation, which examines whether contractual accountability mechanisms are not merely formal but actively used in policy implementation. Evidence of activation includes standardized industrial contracts, performance linked continuation rules and routine verification practices.

The second criterion is expectation stabilization, which assesses whether manufacturers exhibit reduced exposure to regulatory volatility and discretionary enforcement. Stabilization is inferred from the presence of confidence windows, predictable fee regimes and consistent administrative behavior.

The third criterion is behavioral alignment, which evaluates whether manufacturers adjust their investment behavior in ways consistent with increased confidence. This includes longer investment horizons, reinvestment decisions and deeper integration into domestic value chains.

The fourth criterion is counterfactual contrast, which compares contexts where incentives are present but accountability mechanisms are weak. Such contrasts are critical for evaluating Proposition 4, as they reveal whether incentives alone can anchor investment in the absence of contractible value creation conditions [111,112].

6.4. Positioning the results within accounting research

From an accounting perspective, the applied results are interpreted as evidence on the governance capacity of accounting systems rather than on firm performance per se. The analysis evaluates whether accounting-based measurement and verification function as institutional technologies that reduce uncertainty and discipline discretion. This positioning aligns with contemporary accounting research that conceptualizes accounting as a constitutive element of governance and policy design. By foregrounding accounting mechanisms in the interpretation of applied results, the chapter reinforces the study's central claim: that sustainable manufacturing investment is anchored not by incentives alone, but by accountability infrastructures that render value creation credible ex-ante.

6.5. Applied results: contractual accountability and industrial confidence window (proposition 1)

The first set of applied results examines whether contractual accountability mechanisms are associated with the formation of industrial confidence window, as proposed in proposition 1. Across the comparative evidence reviewed, contexts in which value creation obligations are specified ex-ante and embedded within standardized contractual arrangements exhibit markedly different governance dynamics from those relying on discretionary incentives.

Applied evidence indicates that ex-ante specification and measurability are critical activation points. Where industrial commitments are translated into a limited number of accounting-based indicators such as local value-added thresholds or reinvestment obligations

administrative interactions become more predictable, reducing scope for discretionary reinterpretation. This predictability is reinforced when verification procedures are routine rather than exceptional, suggesting that verification frequency, rather than audit intensity, plays a central role in confidence formation [36].

Furthermore, the presence of graduated enforcement mechanisms where non-compliance triggers proportionate and pre-specified responses correlates with lower levels of regulatory contestation and fewer escalation disputes. Importantly, applied evidence suggests that firms interpret predictable enforcement not as a threat but as a stabilizing signal, consistent with recent findings in public governance and accounting research.

Taken together, these patterns indicate that contractual accountability mechanisms contribute to the stabilization of expectations regarding regulatory behavior and policy durability. Industrial confidence window, in this sense, emerges not from policy generosity but from the routinization of accounting-based accountability practices. These findings provide preliminary support for propositions 1, subject to further integration with mediating and outcome-based evidence.

6.6. Applied results: industrial confidence window and investment anchoring (propositions 2)

The second set of applied results evaluates whether higher levels of industrial confidence window are associated with anchored value creating manufacturing investment, as posited in Proposition 2. Evidence across institutional settings suggests that confidence formation is reflected in distinct investment behaviors that extend beyond initial project entry.

First, environments characterized by stabilized rules and credible dispute resolution mechanisms exhibit higher investment persistence, measured through reinvestment decisions, capacity expansions and longer asset life cycles. These behaviors contrast sharply with contexts where firms limit exposure by maintaining reversible or modular investments, even when incentives are substantial [113,114].

Second, applied evidence shows that industrial confidence window is associated with greater domestic value chain embeddedness. Firms operating within predictable governance environments are more likely to establish long-term supplier relationships, invest in local workforce development, and participate in collaborative upgrading initiatives. These outcomes suggest that confidence reduces the perceived risks of relational contracting and sunk cost commitments [115,116].

Third, productive upgrading though more difficult to observe directly appears more prevalent where confidence is supported by consistent accounting and monitoring arrangements. Proxy indicators such as certification attainment, process standardization and product complexity shifts suggest that firms are more willing to undertake irreversible upgrading investments when governance expectations are stable [117,118].

Collectively, these applied results indicate that industrial confidence window functions as a behavioral stabilizer, shaping the depth and durability of manufacturing investment. While the evidence does not imply uniform outcomes across all contexts, the observed patterns align with the theoretical expectations underlying proposition 2, pending integrated assessment alongside mediation and counterfactual analysis [119].

6.7. Interim synthesis: emerging patterns without final judgment

At this stage of the analysis, two interim patterns emerge. First, contractual accountability appears to function as a necessary condition for industrial confidence window, though not always a sufficient one. Second, industrial confidence window is consistently associated with investment behaviors indicative of anchoring, even where incentive levels vary.

Crucially, these patterns underscore the importance of sequencing. Accountability mechanisms precede confidence formation, which in turn precedes investment deepening. This sequencing challenges conventional industrial policy logic and reinforces the study's central theoretical contribution. However, definitive assessment of hypothesis validity requires integrating these results with mediation analysis and counterfactual contrasts, which are addressed in the final part of this chapter.

6.8. Integrated assessment of propositions (1–4)

This section integrates the applied evidence presented in parts 1 and 2 to provide a consolidated assessment of the study's hypotheses. The evaluation follows a theory consistent judgment logic, focusing on whether observed institutional and investment outcomes align with the predicted causal mechanisms rather than on effect magnitudes.

Propositions 1 posits that contractual accountability is positively associated with the formation of industrial confidence window. Across the comparative evidence examined, this hypothesis receives strong support. Contexts in which value creation obligations are specified ex-ante, monitored through accounting-based metrics and subject to predictable enforcement exhibit stabilized regulatory expectations and reduced discretionary intervention. These features collectively contribute to confidence formation by transforming policy commitments into credible, verifiable obligations. The evidence indicates that accountability mechanisms must be routinized, not merely formalized, for confidence to emerge. In the Moroccan automotive case (2012–2022), the contractual specification of local content thresholds (40% rising to 60%) increased investor confidence, reflected in sustained expansion by Renault and subsequent supplier clustering in Tangier.

Propositions 2 suggests that industrial confidence window is positively associated with anchored value creating manufacturing investment. Applied results provide moderate to strong support for this hypothesis. Higher levels of predictability and dispute resolution capacity are consistently associated with investment persistence, reinvestment behavior and deeper domestic value chain integration. However, the strength of this association varies across institutional contexts, suggesting that confidence interacts with complementary factors such as infrastructure quality and market access. In Germany's advanced manufacturing sector (1995–2010), predictable enforcement of subsidy-linked performance clauses corresponded with long-term capital retention and minimal exit volatility among supported firms.

Propositions 3 proposes that industrial confidence window mediates the relationship between contractual accountability and investment anchoring. The integrated evidence supports the theoretically anticipated partial mediation structure, whereby contractual accountability influences investment both directly and indirectly through industrial confidence. While accountability mechanisms influence investment behavior directly in some cases particularly through enforceable contractual clauses the most durable investment outcomes are observed where accountability operates through stabilized expectations and reduced institutional risk.

This finding underscores the analytical importance of industrial confidence window as a governance outcome rather than a residual sentiment.

The South Korean heavy industry case (1965–1985) illustrates partial mediation: while export performance monitoring increased industrial confidence among chaebols, direct state enforcement mechanisms independently influenced capital allocation decisions.

Propositions 4 asserts that incentive-based industrial policies lacking ex-ante contractible value-creation conditions fail to anchor manufacturing investment. The evidence provides strong support for this hypothesis. Negative and mixed cases demonstrate that generous incentives, when decoupled from measurable and enforceable obligations, are insufficient to generate sustained investment or upgrading. In such contexts, firms exhibit opportunistic entry and exit behavior, confirming the limits of incentive centric policy designs.

Comparative evidence suggests that in Morocco and South Korea, accountability mechanisms were operationalized prior to large scale fiscal incentives, whereas in several MENA contexts lacking such sequencing, incentive-heavy regimes failed to anchor manufacturing investment. Table 3 presents propositions–case mapping.

Table 3: *Presents propositions–case mapping.*

Propositions	Case evidence	Nature of support
1	Morocco automotive (2012–2022)	Strong support
2	Germany manufacturing (1995–2010)	Moderate–Strong
3	South Korea (1965–1985)	Partial mediation
4	Comparative sequencing (Korea/Morocco vs MENA)	Consistent pattern

6.9. Counterfactual evidence and negative cases

Counterfactual analysis plays a critical role in strengthening causal inference. Contexts characterized by high incentive generosity but weak accountability structures provide analytically valuable contrasts. In these cases, investment behavior is marked by short project lifecycles, limited reinvestment and shallow domestic integration, despite favorable fiscal conditions. These negative cases illustrate that incentives cannot compensate for institutional uncertainty. Where enforcement is unpredictable or dispute resolution is slow and discretionary, firms rationally limit exposure by adopting reversible investment strategies. This pattern reinforces the study’s central claim that accountability infrastructures, rather than fiscal inducements, constitute the binding constraint on industrial investment anchoring [120].

6.10. Implications for applied evaluation and policy learning

Beyond hypothesis testing, the applied results yield important insights for policy learning. First, they demonstrate that accountability mechanisms are not merely compliance tools but confidence-generating institutions. Second, they reveal that partial implementation such as contractualization without predictable enforcement produces correspondingly partial outcomes. Third, they highlight the importance of sequencing: accountability must precede confidence, which must precede investment deepening.

For Egypt, these findings suggest that policy success should be evaluated not only by investment volumes but by the quality and durability of investment behavior. Monitoring

whether accountability mechanisms are activated and whether confidence is forming provides early signals of policy effectiveness, enabling corrective action before fiscal resources are exhausted.

6.11. Transition to discussion and implications

This chapter completes the applied assessment of the proposed framework and hypotheses. The results confirm the central theoretical proposition that sustainable manufacturing investment is anchored through accountability driven confidence formation rather than incentive generosity alone. The next chapter builds on these findings by situating them within the broader accounting and industrial policy literature, discussing theoretical, practical and policy implications and outlining directions for future research.

7. Discussion, Implications and Value Creating Industrial Governance

7.1. Reinterpreting the findings: from empirical patterns to governance meaning

The findings of this study extend beyond the confirmation or rejection of individual hypotheses. They collectively reveal a deeper governance insight: manufacturing investment decisions are fundamentally shaped by the credibility of institutional commitments rather than by the magnitude of policy incentives. This insight reframes how industrial policy effectiveness should be understood, evaluated and designed particularly in high-uncertainty and institutionally fragmented contexts such as Egypt.

Contrary to dominant industrial policy narratives that prioritize fiscal generosity and investment promotion volumes, the results demonstrate that accountability infrastructures precede and condition investment behavior. Where contractual accountability mechanisms are operationalized ex ante and enforced predictably, industrial confidence window emerges as a governance outcome that stabilizes expectations and enables long-term investment planning by reducing perceived institutional volatility [121].

This finding aligns with and extends recent accounting research emphasizing the constitutive role of accounting systems in shaping economic behavior rather than merely recording it [122-124].

This section discusses the broader governance implications of the validated analytical structure.

7.2. Positioning the results within contemporary accounting literature

From an accounting perspective, the findings reinforce the view that accounting operates as an institutional technology of governance, shaping how commitments are interpreted, monitored, and enforced. The observed relationship between accounting-based measurability and industrial confidence window supports recent arguments that accounting's primary economic function lies in reducing uncertainty and disciplining discretion [125].

Moreover, the mediating role of industrial confidence window highlights the limitations of performance measurement systems that prioritize ex post reporting over ex-ante commitment design. Traditional accounting controls, when detached from contractual accountability, appear insufficient to anchor investment behavior. This insight contributes to an emerging

stream of accounting research that emphasizes the temporal dimension of accountability specifically, the importance of shaping expectations before resources are committed [126-128].

The findings also challenge narrow conceptions of audit and verification as compliance tools. Instead, verification functions as a confidence generating signal, provided that it is routinized and predictable. This interpretation advances audit theory by positioning verification not merely as a detection mechanism but as a stabilizing institutional practice.

7.3. Theoretical contributions: advancing an accountability-based theory of industrial investment

The study makes three interrelated theoretical contributions. First, it advances an accountability-based theory of industrial investment, proposing that investment anchoring is governed by the credibility of institutional commitments rather than by incentive structures alone. This contribution integrates insights from accounting, institutional economics, and industrial policy into a coherent explanatory framework.

Second, the findings refine existing theories of industrial policy by introducing industrial confidence window as a mediating governance construct. Unlike trust or expectations, industrial confidence window is grounded in observable institutional arrangements contracts, accounting metrics, and enforcement routines. This conceptual clarification enhances analytical precision and avoids the ambiguity often associated with attitudinal constructs.

Third, the study contributes to governance theory by demonstrating that predictability, rather than flexibility, constitutes the dominant driver of productive investment in uncertain environments. This insight challenges policy prescriptions that emphasize adaptive discretion and highlight the disciplining role of stable accounting-based rules.

7.4. Interim reflection: why these findings matter for Egypt

For Egypt, the implications are profound. The findings suggest that industrial underperformance cannot be addressed through incremental incentive adjustments or ad hoc facilitation measures. Instead, a structural shift toward accountability centered industrial governance is required. This shift redefines the role of the state from an incentive provider to a credible contractual counterparty. In this light, the study offers a diagnostic lens for understanding why previous industrial initiatives failed to generate sustained investment. The absence of ex ante contractibility and predictable enforcement rendered policy commitments reversible in the eyes of manufacturers. As a result, rational investors limited exposure, reinforcing the very outcomes that policymakers sought to avoid.

7.5. Validity of the hypotheses and boundary conditions

The applied assessment reported in chapter 6 provides differentiated support for the study's hypotheses, revealing not only their validity but also their boundary conditions.

Propositions 1 receives strong support insofar as contractual accountability mechanisms consistently precede the formation of industrial confidence window. However, the findings also indicate that accountability must be operationally routinized to be effective. Formal contracts without consistent verification and enforcement routines fail to stabilize expectations, limiting the confidence building effect.

Propositions 2 is supported conditionally. Industrial confidence window is associated with investment anchoring when complementary institutional conditions such as infrastructure reliability and administrative responsiveness are present. In their absence, confidence formation alone is insufficient to induce deep upgrading, suggesting that confidence functions as a necessary but not sufficient condition for sustained industrial transformation.

Propositions 3 is validated through partial mediation. While accountability mechanisms exert some direct influence on investment behavior, the most durable outcomes emerge when accountability operates through confidence formation. This finding refines the causal model by demonstrating that confidence amplifies and stabilizes the effects of accountability, rather than merely transmitting them.

Propositions 4 receives strong and unambiguous support. Incentive-centric regimes lacking contractible value-creation conditions consistently fail to anchor investment. The evidence underscores that incentives may attract entry but do not secure persistence, reinforcing the theoretical claim that accountability, not generosity, constitutes the binding constraint.

7.6. Comparative interpretation: why similar policies produce divergent outcomes

A central contribution of this study lies in explaining why ostensibly similar industrial policies yield divergent outcomes across countries. Comparative interpretation suggests that divergence arises not from policy content but from differences in governance architectures. Jurisdictions that embed incentives within enforceable contractual frameworks generate confidence and upgrading, whereas those that rely on discretionary implementation experience volatility and opportunism.

This interpretation aligns with comparative institutional research emphasizing that policy credibility is endogenous to governance arrangements rather than exogenously given [128]. The findings further suggest that successful industrializers did not eliminate discretion; they bounded it through accounting-based rules that rendered discretion predictable and reviewable.

Importantly, the study cautions against simplistic policy borrowing. Transplanting incentive schemes without replicating their accountability infrastructures risks reproducing failure rather than success. This insight reframes comparative analysis as a process of functional translation, not institutional imitation.

7.7. Explaining partial, mixed and negative outcomes

Not all observed outcomes conform neatly to theoretical expectations. Partial and mixed results are analytically significant, as they illuminate implementation gaps and institutional frictions. In several contexts, accountability mechanisms were introduced but undermined by inconsistent enforcement or prolonged dispute resolution. These gaps eroded confidence despite formal compliance with policy design principles.

Negative cases where incentives were generous yet investment remained shallow highlight the limits of reform sequencing. Introducing incentives before establishing credible accountability structures creates expectations of reversibility, encouraging firms to adopt short-term strategies. These findings support a sequencing logic whereby accountability infrastructures must precede incentive expansion.

From an accounting standpoint, mixed outcomes reveal the dangers of measurement without consequence. Performance indicators that are not linked to enforceable decisions lose informational and disciplinary value, reinforcing skepticism rather than confidence.

7.8. Implications for Egypt: interpreting the findings in context

For Egypt, the discussion suggests that industrial reform efforts should prioritize institutional credibility over policy visibility. High-profile initiatives lacking contractual clarity and predictable enforcement are unlikely to anchor investment, regardless of fiscal scale. Conversely, modest incentives embedded within credible accountability frameworks may yield disproportionately positive outcomes. The findings also explain the persistence of informal and quasi-formal industrial activity. Where formal governance arrangements are perceived as discretionary and unpredictable, firms rationally seek alternative operating modes. Addressing informality therefore requires rebuilding confidence through credible, accounting-mediated commitments, not merely through enforcement intensification.

7.9. Theoretical, practical, social and economic implications

7.9.1. Theoretical implications: The study advances accounting scholarship by repositioning accounting. Rather than treating accounting as an ex-post reporting device, it conceptualizes it as an ex-ante institutional commitment technology. In doing so, it reframes accountability as a forward-looking governance mechanism. This shift reframes accountability as a forward-looking governance mechanism that structures expectations before capital is sunk. By empirically substantiating industrial confidence window as a mediating construct grounded in observable accounting practices, the study extends institutional and accounting theories that emphasize uncertainty reduction, rule predictability and enforcement credibility as primary drivers of economic coordination.

7.9.2. Practical implications: For practitioners and policymakers, the findings imply that effective industrial policy design hinges on contractual clarity, parsimonious measurability and predictable enforcement rather than incentive magnitude. Accounting-based metrics should be limited, verifiable and explicitly linked to continuation or withdrawal decisions. Verification routines must be regularized to signal commitment stability, while dispute-resolution pathways should be time-bound and transparent to preserve confidence.

7.9.3. Social implications: By lowering institutional uncertainty, accountability-centered governance can facilitate labor upgrading, supplier development, and skill formation outcomes that rely on firms' willingness to undertake irreversible commitments. Where confidence is credible, firms are more likely to invest in workforce training and long-term supplier relationships, generating inclusive spillovers beyond firm boundaries.

7.9.4. Economic implications: At the macro level, the results suggest a pathway to investment deepening without fiscal escalation. Predictability substitutes for generosity: modest incentives embedded in credible accountability infrastructures can yield durable investment anchoring, improve value chain embeddedness and productive upgrading while contain fiscal risk.

7.10. Policy recommendations for industrial transformation in Egypt

Drawing directly from the findings, five policy recommendations are proposed, sequenced to maximize credibility and learning:

- **Institutionalize ex-ante industrial contracts:** Replace discretionary approvals with standardized contracts specifying value-creation obligations, reporting schedules and graduated enforcement. Contracts should be uniform in structure but adaptable in targets.
- **Adopt parsimonious accounting metrics with consequences:** Limit indicators to a small set of high-impact measures (e.g., reinvestment persistence, local sourcing ratios). Link outcomes explicitly to continuation, escalation, or recalibration decisions.
- **Create time-bound industrial confidence windows:** Stabilize key rules, fees, and procedures for defined periods to enable long-horizon planning and irreversible investments.
- **Implement fast-track administrative dispute resolution:** Establish clear timelines and escalation protocols to resolve conflicts predictably, reducing perceived institutional risk.
- **Sequence incentives after accountability activation:** Expand incentives only once contractual accountability and verification routines are demonstrably operational to avoid opportunistic entry.

These recommendations prioritize credibility before scale, aligning policy ambition with administrative feasibility.

7.11. Contributions, limitations and research frontiers

7.11.1. Contributions: The study contributes an accountability-centered theory of industrial investment, operationalized through accounting-based mechanisms and validated via applied analysis. It clarifies industrial confidence window as a governance outcome and offers a transferable design logic for high uncertainty contexts.

7.11.2. Limitations: The analysis relies on convergent applied evidence rather than large sample econometrics. While appropriate to the research question, future work could complement this approach with micro-level data as institutional reforms mature.

7.11.3. Research frontiers: Future studies may examine dynamic learning effects of accountability activation, comparative sequencing strategies across sectors and the interaction between digital reporting infrastructures and confidence formation. Extending the framework to subnational industrial zones also presents a promising avenue.

8. Conclusion and Future Research Directions

8.1. Concluding synthesis

This study set out to re-examine the foundations of industrial development through an accounting centered governance lens. Moving beyond incentive-centric narratives, the analysis demonstrates that sustainable manufacturing investment is anchored primarily by the credibility of institutional commitments. The findings confirm that contractual accountability, when operationalized through parsimonious accounting metrics and predictable enforcement routines, precedes the formation of industrial confidence window, which in turn conditions the depth and durability of manufacturing investment.

By integrating accounting, industrial policy and governance scholarship, the study offers a coherent explanation for persistent underinvestment in high-uncertainty contexts. Rather than reflecting capital scarcity or excessive risk aversion, weak investment outcomes are shown to be rational responses to institutional opacity and enforcement volatility. This reframing shifts the diagnostic focus from policy volume to policy credibility, underscoring the central role of accounting-based commitment technologies in shaping economic behavior.

8.2. Contributions to accounting and industrial policy research

The study contributes to accounting research by advancing an ex-ante view of accountability, positioning accounting as a forward-looking mechanism that structures expectations before resources are committed. This contribution challenges traditional emphases on ex-post reporting and expands the analytical scope of accounting scholarship to encompass commitment design, verification routinization, and enforcement predictability. For industrial policy research, the study introduces industrial confidence window as a distinct governance construct grounded in observable institutional arrangements rather than attitudinal measures. By clarifying its mediating role, the study reconciles disparate findings in the literature and explains why similar policy instruments yield divergent outcomes across contexts. The framework thus provides a transferable design logic for industrial governance in settings characterized by institutional fragmentation.

8.3. Implications for policy design and evaluation

The findings carry clear implications for policy design. Effective industrial strategies should prioritize contractual clarity, limited and verifiable performance metrics and time bound stabilization of enforcement practices. Importantly, incentives should be sequenced after accountability mechanisms are operational, not before. From an evaluative standpoint, policy success should be assessed by the quality and persistence of investment behavior rather than by short-term investment volumes or fiscal outlays. In the Egyptian context, these implications suggest that rebuilding manufacturing capacity requires repositioning the state as a credible contractual counterparty. By institutionalizing accountability-centered governance, policymakers can generate confidence without escalating fiscal costs, enabling investment deepening and value-chain embeddedness over time.

8.4. Limitations

Several limitations merit acknowledgement. First, the study relies on applied and comparative evidence rather than large-sample econometric testing. While appropriate to the research question, future work could complement this approach with micro-level data as accountability reforms mature. Second, the framework abstracts from sector-specific technological dynamics, which may moderate the strength of observed relationships. Third, implementation capacity varies across administrative levels, potentially affecting generalizability within subnational contexts.

8.5. Directions for future research

Future research can extend this work in several directions. Scholars may examine the dynamic learning effects of accountability activation, exploring how repeated verification cycles influence confidence over time. Comparative studies across sectors can refine boundary conditions and identify sector-specific adaptations. Additionally, research on digital reporting infrastructures and real-time verification may illuminate how technology reshapes

accountability and confidence formation. Finally, subnational analyses of industrial zones can provide granular insights into the interaction between local governance capacity and investment anchoring.

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